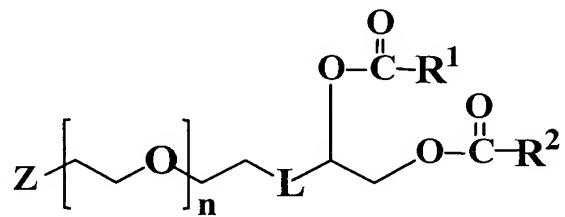


IT IS CLAIMED:

1. A method of reducing liposome-induced complement activation upon *in vivo* administration of liposomes containing an entrapped therapeutic agent, comprising
  - providing liposomes comprised of a vesicle-forming lipid and between 1-10 mole percent of a neutral lipopolymer having the formula:



where each of  $\text{R}^1$  and  $\text{R}^2$  is an alkyl or alkenyl chain having between 8 and 24 carbon atoms;

$n = 10 - 300$ ,

$\text{Z}$  is selected from the group consisting of  $\text{C}_1\text{-C}_3$  alkoxy,  $\text{C}_1\text{-C}_3$  alkyl ether,  $n$ -methylamide, dimethylamide, methylcarbonate, dimethylcarbonate, carbamate, amide,  $n$ -methylacetamide, hydroxy, benzyloxy, carboxylic ester,  $\text{C}_1\text{-C}_3$  alkyl carbonate, and aryl carbonate; and

$\text{L}$  is selected from the group consisting of (i)  $-\text{X}-(\text{C}=\text{O})-\text{Y}-\text{CH}_2-$ , (ii)  $-\text{X}-(\text{C}=\text{O})-$ , and (iii)  $-\text{X}-\text{CH}_2-$ , where  $\text{X}$  and  $\text{Y}$  are independently selected from oxygen, NH, and a direct bond, with the proviso that when  $\text{L}$  is  $-\text{X}-(\text{C}=\text{O})-$ ,  $\text{X}$  is not NH;

and the remainder vesicle-forming lipids.

2. The method of claim 1, wherein  $\text{X}$  is oxygen and  $\text{Y}$  is nitrogen.
3. The method of claim 1, wherein  $\text{L}$  is a carbamate linkage, an ester linkage, or a carbonate linkage.
4. The method of claim 3, wherein  $\text{L}$  is  $-\text{O}-(\text{C}=\text{O})-\text{NH}-\text{CH}_2-$  (a carbamate linkage).

5. The method of claim 1, wherein Z is hydroxy or methoxy.
6. The method of claim 1, wherein said preparing includes preparing liposomes containing about 1 to 10 mole % of the neutral lipopolymer distearoyl (carbamate-linked) polyethylene glycol.
7. The method of claim 1, wherein said preparing includes preparing liposomes containing about 1 to 10 mole % of the neutral lipopolymer methoxy-polyethelene glycol 1,2 distearoyl glycerol.
8. The method of claim 1, wherein each of R<sup>1</sup> and R<sup>2</sup> is an unbranched alkyl or alkenyl chain having between 8 and 24 carbon atoms.
9. The method of claim 8 wherein each of R<sup>1</sup> and R<sup>2</sup> is C<sub>17</sub>H<sub>35</sub>.
10. The method of claim 1, wherein n is between about 20 and about 115.
11. The method of claim 1, wherein the therapeutic drug is a chemotherapeutic agent.
12. The method of claim 11, wherein said chemotherapeutic agent is an anthracycline antibiotic.
13. The method of claim 12, wherein said chemotherapeutic agent selected from the group consisting of doxorubicin, daunorubicin, epirubicin, and idarubicin.
14. The method of claim 11, wherein said chemotherapeutic agent is a platinum-containing compound.
15. The method of claim 14, wherein said platinum-containing antibiotic is cisplatin or a cisplatin analogue selected from the group consisting of carboplatin, ormaplatin, oxaliplatin, ((-)-(R)-2-aminomethylpyrrolidine (1,1-

cyclobutane dicarboxylato))platinum, zeniplatin, enloplatin, lobaplatin, (SP-4-3(R)-1,1-cyclobutane-dicarboxylato(2-)-(2-methyl-1,4-butanediamine-N,N'))platinum, nedaplatin and bis-acetato-ammine-dichloro-cyclohexylamine-platinum(IV).